

FIG. 1

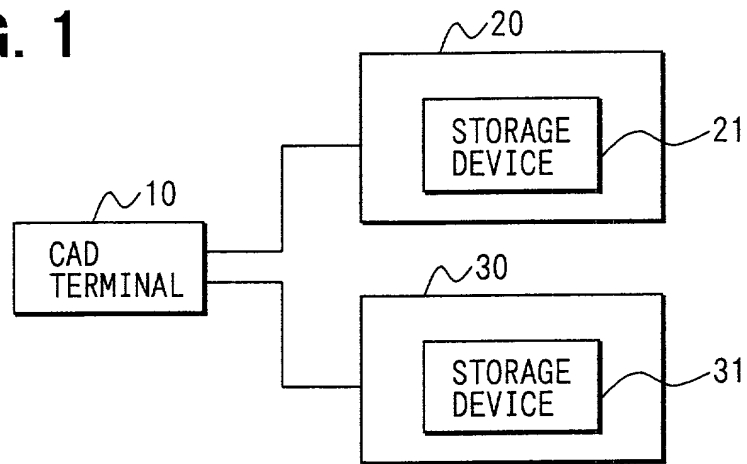


FIG. 2

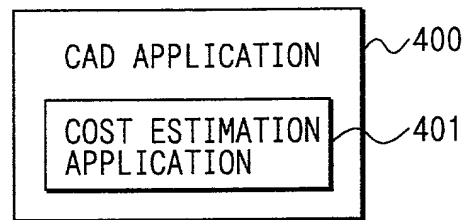
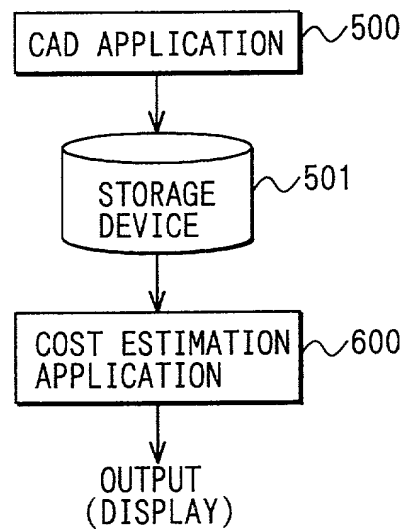


FIG. 3



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144	146	148	150	152	154	156	158	160	162	164	166	168	170	172	174	176	178	180	182	184	186	188	190	192	194	196	198	200
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120	123	126	129	132	135	138	141	144	147	150	153	156	159	162	165	168	171	174	177	180	183	186	189	192	195	198	201	204	207	210	213	216	219	222	225	228	231	234	237	240	243	246	249	252	255	258	261	264	267	270	273	276	279	282	285	288	291	294	297	300
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	104	108	112	116	120	124	128	132	136	140	144	148	152	156	160	164	168	172	176	180	184	188	192	196	200	204	208	212	216	220	224	228	232	236	240	244	248	252	256	260	264	268	272	276	280	284	288	292	296	300	304	308	312	316	320	324	328	332	336	340	344	348	352	356	360	364	368	372	376	380	384	388	392	396	400
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	230																																																						

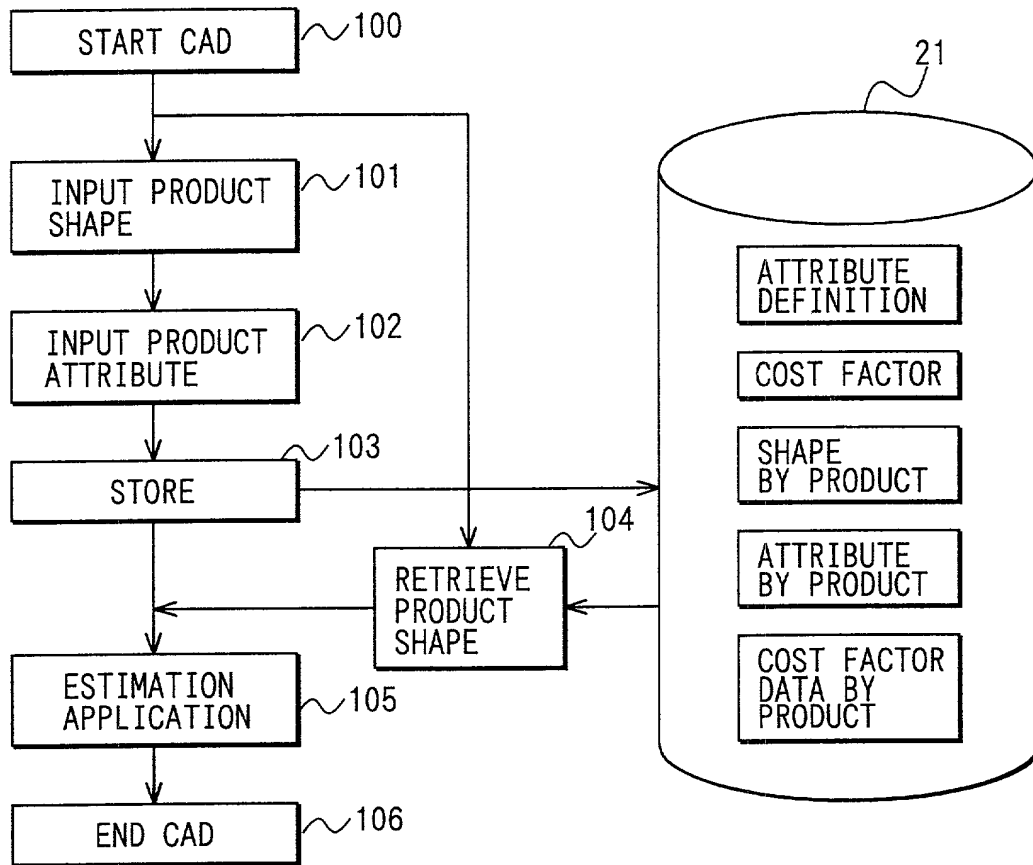


FIG. 5

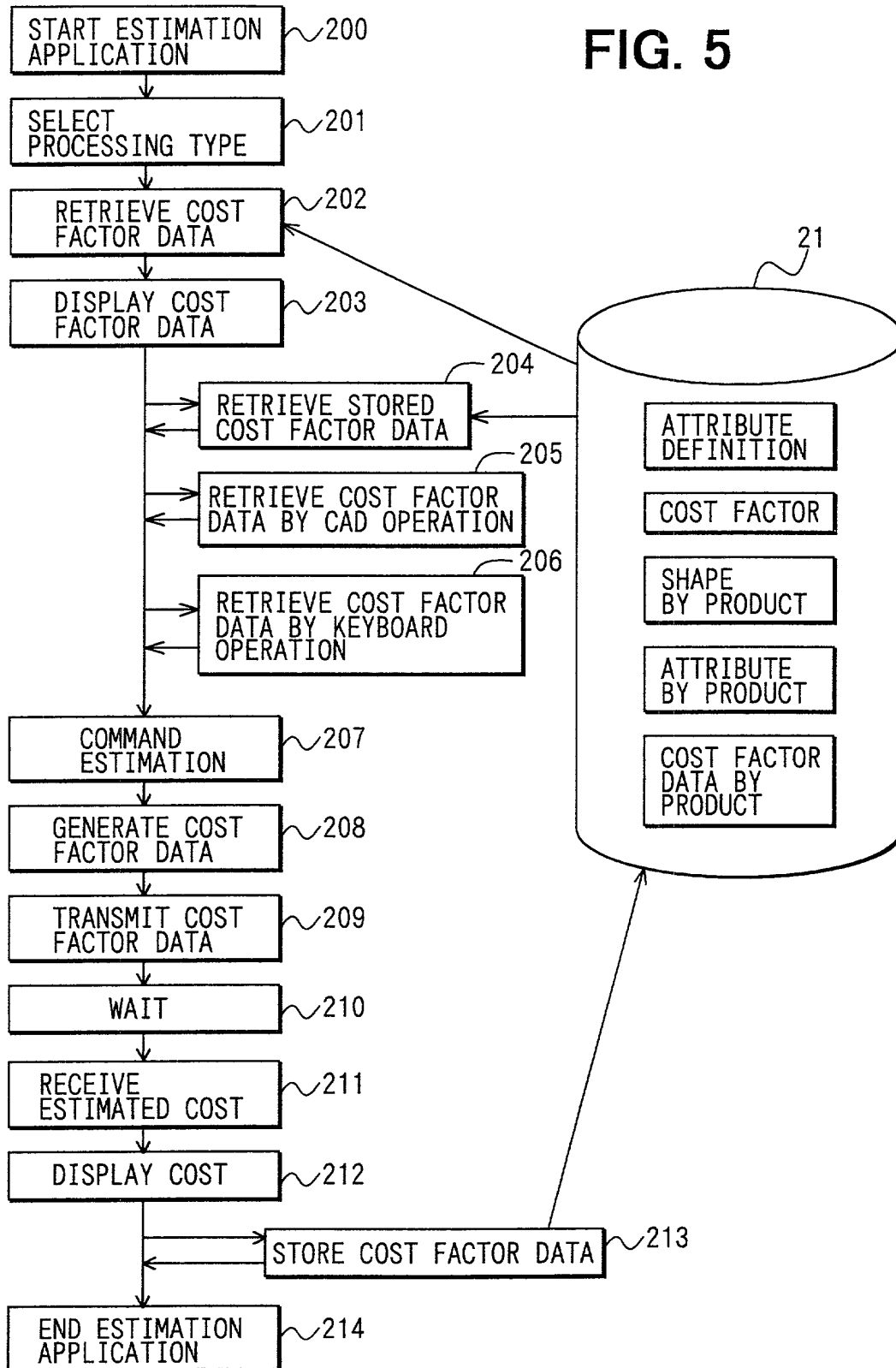


FIG. 6

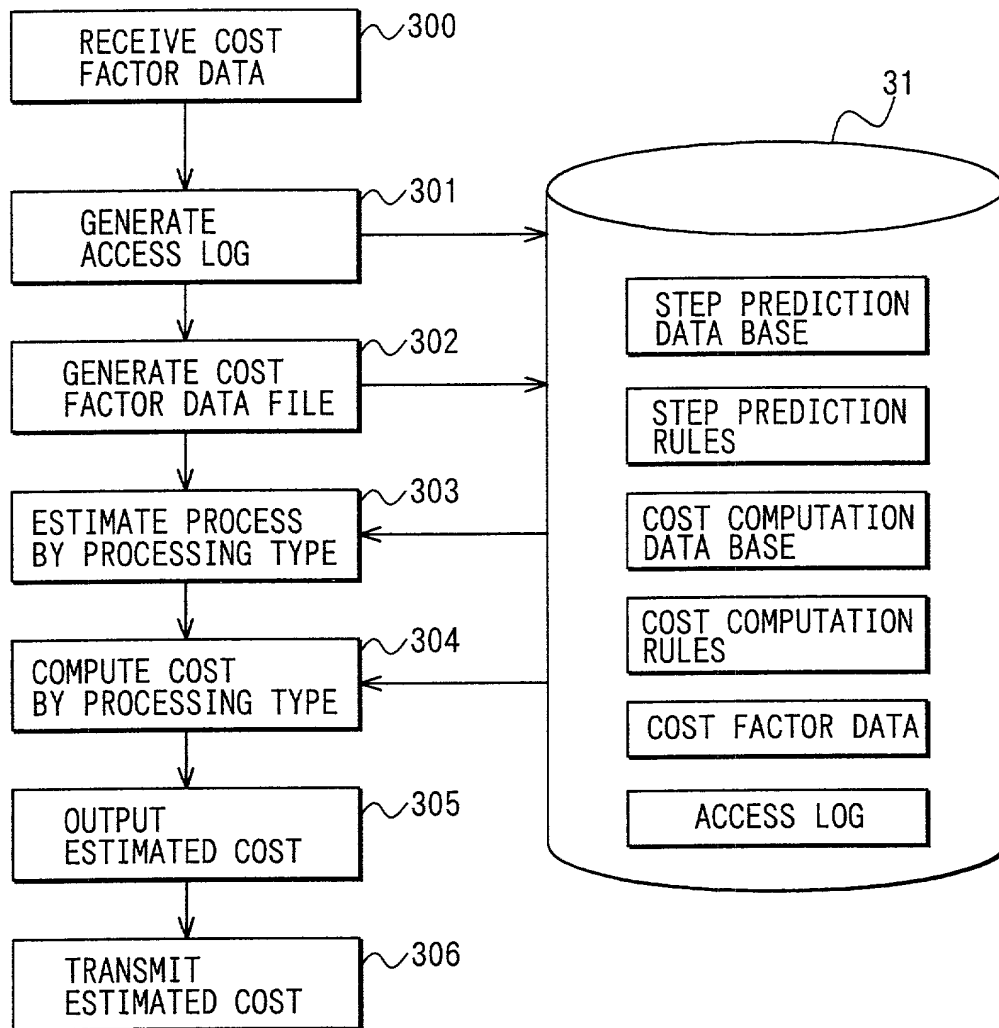


FIG. 7

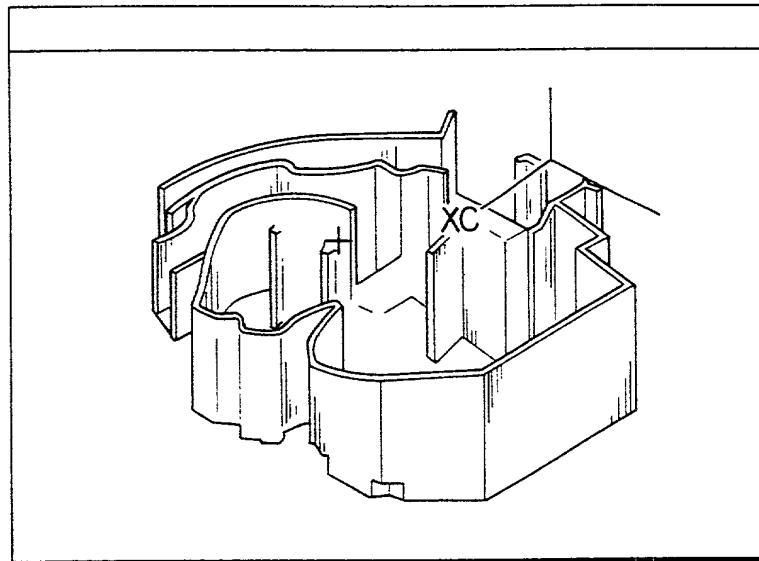


FIG. 8

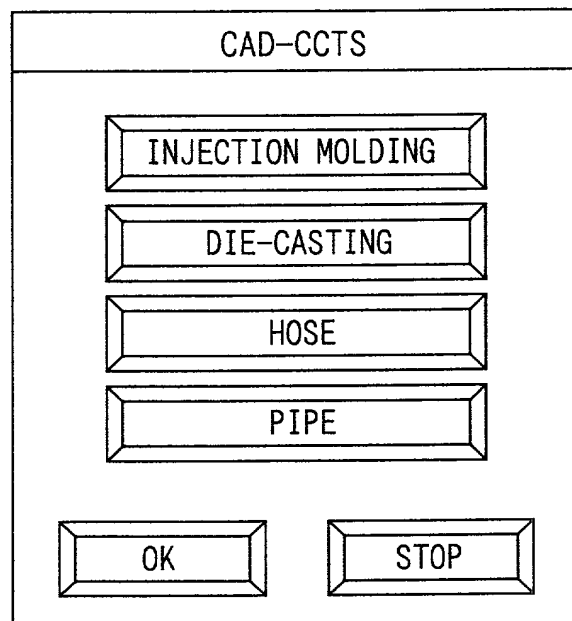


FIG. 9

CAD-CCTD INJECTION MOLDING									
FILE		PRODUCT NO. 123456-7890		NAME CASING		PRODUCTION 2000		UNITS/MON	
MATERIAL ABS N-1		NOTE		SPECIFIC WEIGHT 1.06 g/cm³		FILLER			
PRICE 400.00 ¥/kg		LOST PRICE 0.00 ¥/kg		NET WEIGHT 200.0 g		INCREASE 1.05			
PRODUCT SIZE									
MEASURE Y : X : Z		RE-MEASURE		LENGTH 200.0 mm		NET AREA 300.0 cm²			
WIDTH 150.0 mm		NET VOLUME 900.0 cm³		HEIGHT 30.0 mm		AVERAGE VOLUME 900.0 cm³			
THICKNESS MEASURE AUTO (2 × VOLUME/SURFACE)		RE-MEASURE		THICKNESS 1.5 mm		COEFFICIENT 1.4		REF	
MATERIAL THERMOPLASTIC THERMOSETTING									
GATE TUNNEL SIDE									
DIRECT PIN									
RUNNER COLD HOT									
UNDERCUT SET SLIDE		GATE CUTTING		ANNEALING SET ANNEALING		FINISHING AFTER GATE CUTTING		DIAMETER 0.0 mm	
INSERT SET INSERT		MOTOR DRIVE FOR SCREW		STOP		ESTIMATE			

FIG. 10

STORED DATA RETRIEVAL	
FILE	
1234567890*	
1234567890 X X X X COMMENT 1085621 1999.11.29	
1234567890 X X X X COMMENT 1085621 1999.10.15	
1234567890 X X X X COMMENT 1085621 1999.10.01	
1234567890 X X X X COMMENT 1085621 1999.09.15	



FIG. 12

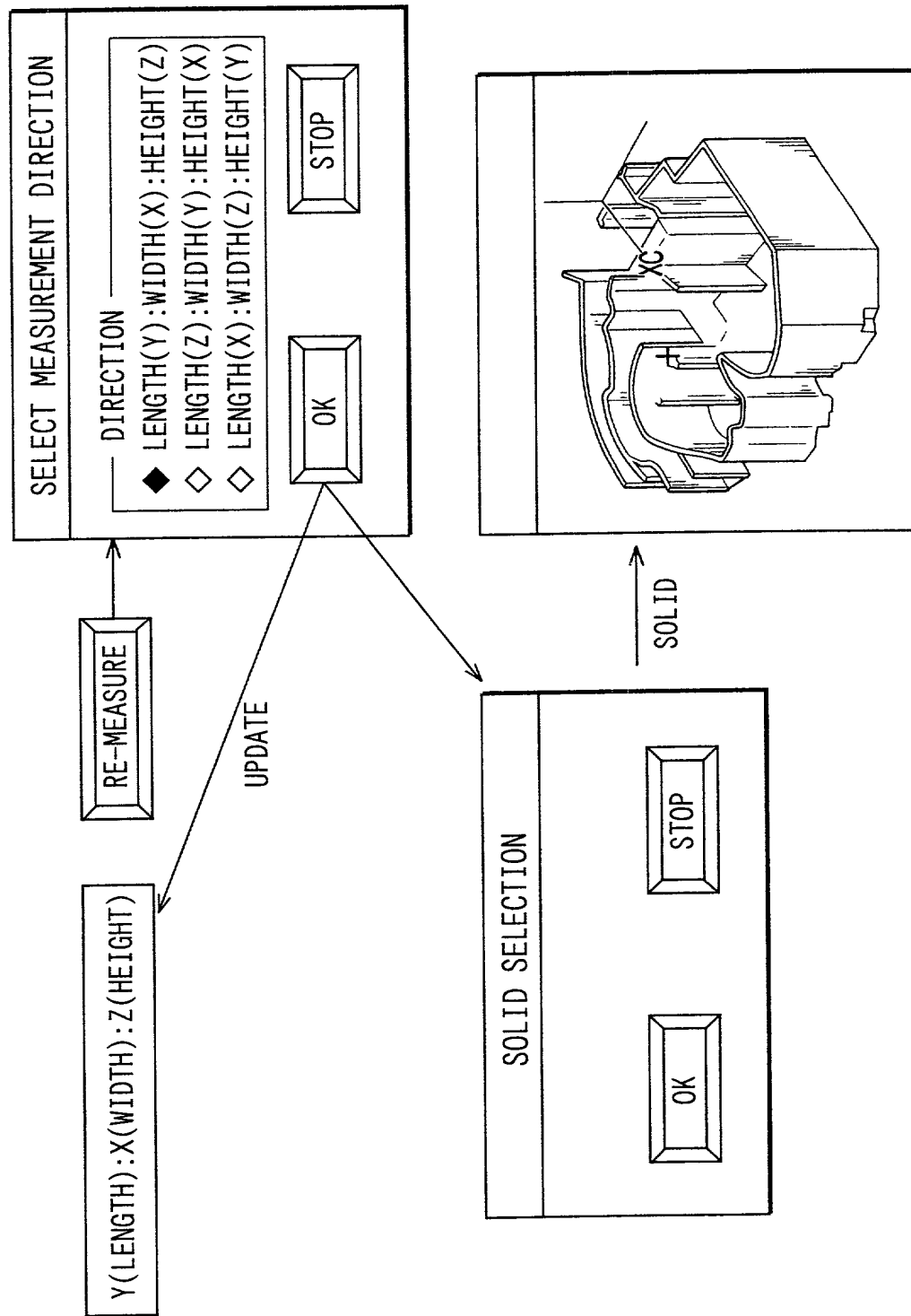


FIG. 13

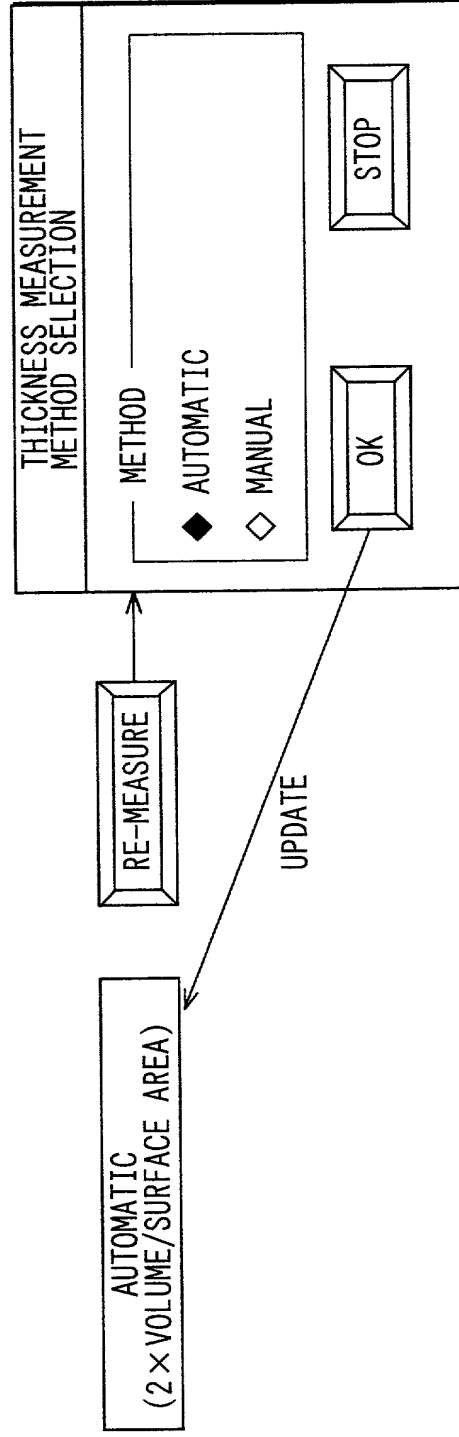
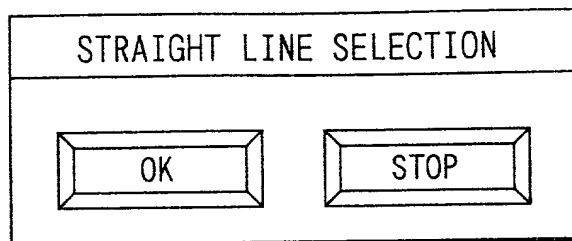


FIG. 14



STRAIGHT LINE

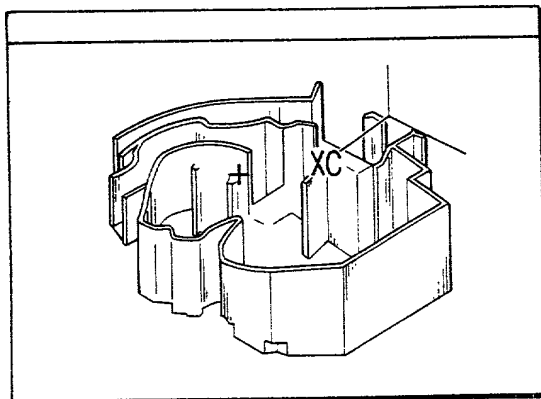


FIG. 15

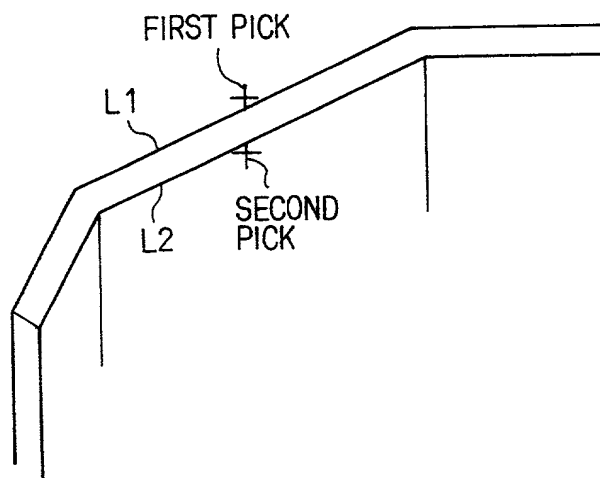


FIG. 16

ESTIMATION RESULT	
INJECTION MOLDING ESTIMATION	99/12/07 9:14:42 OPERATOR : MR.SUZUKI
NO. :1234567890 NAME :CASING VOLUME :2000 UNITS/MON. MOLDING:150ton	
ESTIMATED COST	
MATERIAL	¥84.00
PROCESSING	¥50.50
DIE	¥62.50
UNIT	¥197.00
MATERIAL) $84.00 = ¥200.0g \times 1.05 \times 400.0/kg$	
PROCESSING)	MOLDING 43.50 CUTTING 2.00 FINISHING 4.00 ANNEALING 1.00
DIE)	DIE UNIT ¥3,000,000 $62.50 = 3000000 \times 1 / (24 \times 2000)$